Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte Robert G. Visser

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Appeal No. 2002-2210
Application 09/553,295

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ON BRIEF

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Before FRANKFORT, STAAB, and McQUADE, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 42 and 56, all of the claims remaining in this application. Claims 43 through 55 have been canceled.

Appellant's invention relates to a method of grinding a glass workpiece and, more particularly, to a "ductile grinding" process wherein there is careful control of the amount of grinding force exerted on the glass surface (specification, pages 1-3). As noted on page 1 of the specification, during the forming process, defects such as mold lines, rough surfaces, small points and other small imperfections may be present on the outer surface of the glass. Known processes of abrasive finishing are used to remove such imperfections, with those processes typically comprising processes categorized as grinding, lapping, fining and polishing. "Grinding" is used to remove large amounts of glass quickly while leaving as fine a scratch pattern as the tooling and abrasive materials used will allow. Any scratches and other surface imperfections left from the rough grinding process are then removed during subsequent processing steps known as "fining" and "polishing." As is made clear numerous times throughout the specification, we again emphasize that appellant's invention in the present application addresses a method of grinding a glass workpiece and, more specifically, represents a refinement of the ductile grinding process (see, for example, page 7, lines 11-16 and page 27, lines 11+).

Independent claims 1, 22 and 56 are representative of the subject matter on appeal and a copy of those claims can be found in the Appendix to appellant's brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Howard et al. (Howard)	3,916,584	Nov. 4, 1975
Christianson et al. (Christianson)	5,888,119	Mar. 30, 1999

Claims 1 through 5, 8 through 16, 18 through 26, 29 through 37, 39 through 42 and 56 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Christianson.

Claims 6, 7, 17, 27, 28 and 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Christianson in view of Howard.

Rather than reiterate the examiner's full commentary regarding the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellant regarding those rejections, we make reference to the examiner's answer (Paper No. 11, mailed June 18, 2002) for the reasoning in support of the

rejections, and to appellant's brief (Paper No. 10, filed April 17, 2002) for the arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we have made the determinations which follow.

In rejecting claims 1 through 5, 8 through 16, 18 through 26, 29 through 37, 39 through 42 and 56 under 35 U.S.C. § 103(a) on the basis of Christianson, the examiner directs us to Figures 1-2 and column 7, line 39 through column 31, line 47 of that patent, urging that Christianson discloses the invention "except for 'to provide a final surface roughness Ra less than about 0.030 micrometer'" (answer, page 3). The examiner then makes the following statements and assertions:

> In col.20, lines 54-65, Christianson discloses the speeds of the polishing machine. In col. 22, lines 63-67, Christianson discloses the cut rate and Ra values of the polishing result. However, Christianson does not specifically disclose the claimed result. Thus, it would

> have been obvious to a person of ordinary skill in the art at the time the invention was made to have operated the polishing machine at the claimed result set forth in the claim since it has been held that discovery of optimum value of result effective variable in known process is ordinary within the skill of the art. In re Boesch, 205 USPQ 215 (CCPA 1980)

Having reviewed and evaluated the applied Christianson patent, we share appellant's assessment of the § 103 rejection based thereon (brief, pages 12-15) and agree with appellant that Christianson is solely directed to the polishing of glass surfaces and neither teaches nor suggests improvements to the grinding phase of finishing a glass surface or glass workpiece as addressed by appellant. As for the examiner's reference to Christianson col. 20, lines 54-65 for the speeds of the polishing machine and col. 22, lines 63-67 for the cut rate and Ra values of the polishing result, we are in total agreement with appellant's views expressed on pages 14-15 of the brief and incorporate them herein as our own.

Since neither the speed nor the cut rate set forth in independent claims 1, 22 and 56 on appeal for appellant's grinding method are disclosed in the cited sections referenced by the examiner, or anywhere else in the Christianson patent, it is

our determination that the examiner has failed to establish a *prima facie* case of obviousness. The examiner's conclusion that it would have been obvious to one of ordinary skill in the art at the time of appellant's invention "to have operated the polishing machine [of Christianson] at the claimed result set forth in the claim [sic] since it has been held that discovery of optimum value of result effective variable in known process is ordinary [sic] within the skill of the art," is totally without foundation and appears to be based entirely on hindsight reconstruction.

Thus, we refuse to sustain the examiner's rejection of claims 1 through 5, 8 through 16, 18 through 26, 29 through 37, 39 through 42 and 56 under 35 U.S.C. § 103(a) based on Christianson.

With regard to the examiner's rejection of claims 6, 7, 17, 27, 28 and 38 under 35 U.S.C. § 103(a) as being unpatentable over Christianson in view of Howard, we have reviewed the Howard patent and agree with appellant that there is nothing in the disclosure this patent which makes up for or otherwise provides

for the deficiencies of the Christianson reference. Accordingly, the rejection of dependent claims 6, 7, 17, 27, 28 and 38 under 35 U.S.C. § 103(a) is not sustained.

In light of the foregoing, the decision of the examiner to reject claims 1 through 42 and 56 under 35 U.S.C. § 103(a) is reversed.

REVERSED

CHARLES E. FRANKFORT Administrative Patent Judge	)	
LAWRENCE J. STAAB Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JOHN P. McQUADE Administrative Patent Judge	)	

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